

File Code: 1940 Monitoring

Date: 8/8/18

To: Yellowstone District Ranger

Subject: West Deer Creek Road Realignment Project

IMPLEMENTATION REVIEW DATE AND PARTICIPANTS

On August 31, 2017 a post project Implementation Monitoring Review was held to evaluate the West Deer Creek Road Realignment Project on the Yellowstone Ranger District. This project was implemented in summer/fall 2015. Monitoring Review attendees included Marna Daley, Clint Sestrich, Nancy Taylor, and Dale White.

OBJECTIVES

The post project Implementation Monitoring Review was held to evaluate the application and effectiveness of project mitigation measures and BMPs. The project was authorized by in Environmental Assessment in March 2014. The purpose of this project was to provide deeded public motorized access to National Forest System lands in the West Fork of Deer Creek.

PROJECT ACTIVITIES

The project primarily involved relocating a portion of FS Road #206 by constructing 1.64 miles of new road on Forest Service lands. In addition, approximately 1.75 miles of the old FS Road #206 was decommissioned and a 0.1 mile segment of severely incised channel (a product of flooding in 2011) was rehabilitated.

EVALUATION PROTOCOL

This review consisted of the following actions.

1. Identification of key project mitigation measures/BMPs stated in the Final Environmental Assessment for the project.
2. Field review of the project
3. Team ratings (consensus) for effectiveness of objectives and the mitigation measures observed at the reviewed units, using the Custer Gallatin NF implementation monitoring format
4. Team recommendations for future CGNF projects

BMP implementation and effectiveness was evaluated using a modified form of the Forestry BMP review protocol developed by the Montana DNRC. The application and effectiveness rating system consisted of the following scoring system:

Application	4 points. Operation meets requirements of objective or measure
	3 points. Minor departure from objective or measure, requirements mostly met
	2 points. Major departure from objective or measure, requirements marginally/barely met
	1 point. Gross neglect of objective or measure, requirements not met at all
Effectiveness	4 points. Adequate Protection of resources, effective
	3 points: Minor & temporary impacts on resources, moderately effective
	2 points: Major & temporary or minor & prolonged impacts on resources, slightly effective
	1 point: Major and prolonged impacts on resources, not effective

EVALUATION WORKSHEET

Evaluation Items - BMP's	Appli- cation	Effect- iveness	Comments
1) Dry Channel Requirement - Activities with potential to deliver sediment to stream channels such as road reclamation, channel reconstruction, and stream crossing installation would occur during dry months under dry channel conditions in Cherry Creek.	2	4	There was one stream culvert installed on the new road alignment. The installation of the culvert occurred during low flow season and Cherry Creek flow was diverted by pump. However, the channel was not completely dry. Due to the nature of Cherry Creek at this location (intermittent and non-fish bearing) it was decided that this protection was adequate
2) Wetland Protection - Vehicles and machinery would not be operated within defined and designated wetland areas	4	4	There were no wetlands impacted by the project
3) Materials in Wetlands/Streams - Materials would not be deposited in streams or wetland areas	4	4	
4) Permits - All required water quality permits, including 124 permits and Nationwide 404 permit compliance validations for stream crossings, would be acquired by the Gallatin NF prior to any ground disturbance	4	4	
5) Equipment Washing A - All off-road equipment would be washed before moving into the project area to ensure that the equipment is free of soil, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds. Off-road equipment includes all construction equipment and such brushing equipment as brush hogs, masticators, and chippers; it does not include chip vans, service vehicles, water trucks, pickup trucks, and similar vehicles not intended for off-road use.	4	4	

6) Equipment Washing B - When working in known weed infested areas, equipment would be cleaned at a washing station before moving to other Forest lands that do not contain noxious weeds.	NA	NA	This was not applicable because there was cheatgrass already existing within the entire project area
7) Seeding - Where feasible, reestablish vegetation on disturbed bare ground with a native, weed-free seed mix to minimize potential weed establishment. Re-vegetation is especially important where the potential for weed introduction may be highest, such as at staging areas.	4	2	Cut and fill slopes were seeded, but it was not highly effective because the local soil contained a high percentage of rock and the site is very dry. Generally there was very little soil available in the rocky sections of the road alignment.
8) Mulch - All straw or hay used for mulching or watershed restoration activities would be certified weed-free.	NA	NA	No mulch was used
10) Signage - The new route would be clearly signed using FS standard signs for private property crossings, distances, and directional routes.	4	4	
11) Waste Rock - Any waste rock remaining at the end of road construction would be removed from NFS lands. Waste rock left piled on the ground would become a haven for weed species.	4	4	There was no waste rock
12) Off-Road Travel - Construction equipment would remain within the road corridor during road construction to the extent possible.	4	4	
13) Topsoil Salvage - The Gallatin National Forest mitigation standard for salvaging topsoil at all excavations of limited extent (Keck 2012) applies to any excavation made during the installation of cattle guards, sign posts, or other installations associated with road construction	4	4	This was done to the extent possible. Most areas along the new road alignment had a very thin topsoil horizon which was difficult to salvage.
14) Grazing - The range administrator would coordinate with the grazing permittee to ensure that livestock grazing is not causing resource damage to newly disturbed areas (pasture rotation, timing).	1	1	This was not done in 2016

	4	4	This was done in 2017
15) Weed Treatment - Protect riparian rehabilitation areas along the closed road from grazing (livestock, wildlife) using passive (timing, rotation) or physical barriers (slashing, exclosure) until vegetation becomes well established.	1	3	Livestock was not excluded in 2016 (see #16 above). Excluding wildlife was not deemed necessary.
16) Road Decommissioning - Old Cherry Creek Road would be closed, removed from the system, and would no longer be available for motorized travel. Customary methods would be used for the closure of the road that may include fencing, signing, seeding, area specific slashing, and drainage installations. It is anticipated that stabilization efforts would focus on riparian portions of the road that were severely damaged in the 2011 flood event, and in areas that involve stream crossings or culverts.	4	4	See Photo 3 below

ADDITIONAL ISSUES/OBSERVATIONS

1. In general the new road is in very good condition but one steep segment is beginning to develop ruts (Photos 1 & 2).
2. The 0.1 mile (approx.) segment of severely incised channel (a product of flooding in 2011) was rehabilitated by breaking down the vertical banks to a slope on which vegetation could establish a stabilizing cover. This treatment hastened a recovery process that would have taken many years to occur naturally (see Photo 4).

PHOTOGRAPHS



Photo 1. Typical view of new road



Photo 2. Steep segment of new road with ruts developing on road surface



Photo 3. Typical view of decommissioned road

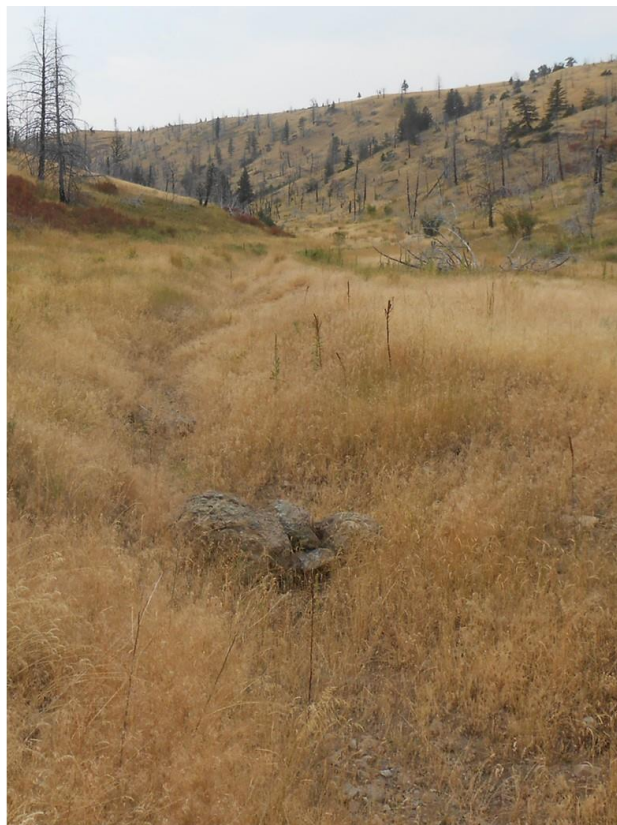


Photo 4. Severely incised channel reach post-flood in 2011 (left) and after rehabilitation (2017, right)

RECOMMENDATIONS

1. When requirements for grazing exclusion are stated in NEPA documents that requirement should be tracked and accomplished.

Dale White
Forest Hydrologist